

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-2 (canceled)

Claim 3 (currently amended): ~~Device for removing mastic according to claim 1, characterized in that~~ The device of claim 23, wherein the motor is of a pneumatic type motor with a vibratory frequency with an order of magnitude of 120 Hz.

Claims 4-5 (canceled)

Claim 6 (currently amended): ~~Device for removing mastic according to claim 1, characterized in that~~ The device of claim 23, wherein the material is a polyetheretherketone loaded with carbon or glass fibers.

Claim 7 (currently amended): ~~Device for removing mastic according to claim 1, characterized in that~~ The device of claim 6, wherein the material is a polyetheretherketone loaded with 30% of glass fibers.

Claim 8 (currently amended): ~~Device for removing mastic according to claim 1, characterized in that~~ The device of claim 23, wherein the head is beveled at an angle of 30°.

Claim 9 (currently amended): ~~Device for removing mastic according to claim 1~~ The device of claim 23, in combination with a stock (42) of tools, ~~suitable flexible tubing~~ particularly including a tube (44) for connection to a source (46) of compressed air, and a housing (48) for adjustment of the air pressure delivered.

Claim 10 (currently amended): ~~Device according to claim 1~~, characterized in that The device of claim 9, further comprising a suction system (50) with a venturi connected to the ~~same~~ source of compressed air ~~supply~~.

Claim 11 (currently amended): ~~Device for removing mastic according to claim 1~~, ~~characterized in that~~ The device of claim 23, wherein the head is beveled at an angle of 45°.

Claim 12 (currently amended): ~~Device for removing mastic according to claim 1~~, ~~characterized in that~~ The device of claim 23, wherein the head is beveled at an angle of 60°.

Claim 13 (currently amended): ~~Device~~ A device for removing polymerized, aircraft-fuel resistant aircraft mastic, comprising:

a vibratory part (26) with a pneumatic motor causing a vibratory alternating movement at a selected frequency of about 120 Hz ~~and a mandrel~~(34); and

a mastic removal tool (28) connected to the vibratory part (26) ~~having a shaft~~ received in the mandrel ~~and a head (38) with a hardness for clearing polymerized, aircraft-fuel-resistant aircraft mastic,~~

a distal end contact portion of the mastic removal tool head being made of a material selected from the group consisting of polyetheretherketones, polyoxymethylenes, polyetherimides and epoxy resins,

~~the contact portion the head~~ being non-abrasive and with ~~the a~~ hardness sufficient, under the effect of the vibratory alternating movement at the selected frequency, to cut off chips of the remove polymerized, aircraft-fuel resistant aircraft mastic from interior surfaces of an aircraft wing and resist wear, but not too hard so as to give rise to scratches of the surfaces under the effect of the vibratory alternating movement;

~~the aircraft mastic being removed at joints between plates of interior wing areas of aircraft without scratching the wing areas.~~

Claim 14 (currently amended): ~~Device~~ A method of using a device for removing aircraft mastic, comprising:

operating a vibratory tool part (26) with a pneumatic motor ~~causing to produce~~ a vibratory alternating movement within an order of magnitude of about 120 Hz and a mandrel(34); and

removing aircraft-fuel resistant aircraft mastic from an interior wing surface of an aircraft with a mastic removal tool (28) having i) a shaft received in the vibratory tool and ii) a head (38) with ~~a hardness for clearing polymerized, aircraft-fuel resistant aircraft mastic;~~ a distal end contact portion of the head being made of a material selected from the group consisting of polyetheretherketones, polyoxymethylenes, polyetherimides and epoxy resins, the contact portion of the head being non-abrasive with ~~the a~~ hardness sufficient to avoid giving rise to

scratches to the surface ~~surfaces~~ under the effect of the vibratory alternating movement ~~[[,]]~~ while removing the aircraft mastic ~~being removed~~ from the surface of an interior wing area of an aircraft without scratching the wing area, the removal accomplished by holding the contact portion of the head in abutment against the mastic under the vibrating alternating movement of the vibratory tool, the aircraft mastic covering i) an assembly of an aeronautical screw secured by a nut within a hole of a plate of the wing area, the aircraft mastic prolonged beyond the nut to adhere to a surface of the plate, and ii) a joint defined by plural plate meeting at a non-planar angle,

the vibratory tool means and mastic removal tool sized to be carried into the wing interior via a manhole opening within the wing, ~~the vibratory means having a connection for a source of compressed air.~~

Claim 15 (currently amended): The device of claim ~~[[1]]~~ 23, wherein the ~~head material is polyoxymethylene made of polyetheretherketones loaded with carbon fibers.~~

Claim 16 (currently amended): The device of claim ~~[[13]]~~ 23, wherein the ~~head material is polyetherimide made of polyetheretherketones loaded with one of carbon and glass fibers.~~

Claim 17 (currently amended): The device of claim ~~[[14]]~~ 23, wherein the ~~head material is epoxy resin made of polyetheretherketones loaded with one of carbon and glass fibers.~~

Claim 18 (currently amended): The device of claim 13, wherein the ~~head~~ material is made of polyetheretherketones loaded with 30% glass fibers.

Claim 19 (currently amended): The ~~device~~ method of claim 14, wherein the head material is made of polyetheretherketones loaded with 30% glass fibers.

Claim 20 (currently amended): The device of claim ~~[[1]]~~ 23, wherein,

the hardness of the material ~~of the head~~ avoids giving rise to scratches, under the effect of the vibratory alternating movement of 120Hz, to the aircraft tanks when constructed of aluminum alloy coated with a protective primer, the hardness selected so that the primer is not removed by the head removing the aircraft mastic, and

the vibratory means and the tool are sized to be carried into the wing interior via a manhole opening within the wing, the vibratory means having a connection for a source of compressed air.

Claim 21 (currently amended): The device of claim 13, wherein,

the hardness of the material ~~of the head~~ avoids giving rise to scratches, under the effect of the vibratory alternating movement, to the aircraft tanks when constructed of aluminum alloy, and

the vibratory means and the tool are sized to be carried into the wing interior via a manhole opening within the wing, the vibratory means having a connection for a source of compressed air.

Claim 22 (currently amended): The ~~device~~ method of claim 14, wherein the hardness of the material of ~~the head~~ avoids giving rise to scratches, under the effect of the vibratory alternating movement, to the aircraft tanks when constructed of aluminum alloy coated with a protective primer, the hardness selected so that the primer is not removed by the head removing the aircraft mastic.

Claim 23 (new) A device for removing aircraft-fuel resistant mastic for the repair of joints in the structures of aircraft tanks, comprising:

 a vibratory tool (26) providing a vibratory alternating movement at a selected vibratory frequency, the vibratory tool comprising a body (30) including a motor (32) and a mandrel (34);

 an aircraft-fuel resistant mastic removal tool (28) comprising a head (38) and a shaft (36) mounted in the mandrel,

 a distal end contact portion of the head being made of a non-abrasive material selected from the group consisting of polyetheretherketones, polyoxymethylenes, polyetherimides, and epoxy resins,

 the selected material providing the contact portion with a hardness sufficient that, under the effect of vibratory alternating movement at the selected vibratory frequency, the contact portion removes abutted aircraft-fuel resistant mastic from joints in interiors of aircraft tanks without giving rise to scratches to the interior surface of the aircraft tanks.